

REMARKS

The Applicant wishes to thank the Examiner for his examination of the present application and for the Examiner's interview of July 15, 2005 at which time the present remarks were discussed.

35 U.S.C. §102

Claims 1, 3, 4, 8, 11-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kamen et al. (U.S. Patent 5,791,425, hereinafter, "Kamen"). Claim 1 is, in part, directed to a transporter for transporting a load over a surface. The transporter includes a support platform, and a sensor module for generating a signal characterizing an attitude of the support platform with respect to the surface. A motorized drive arrangement drives at least one ground-contacting element. A controller commands the motorized drive arrangement to apply a torque to one or more of the ground-contacting elements *as a function of the attitude of the support platform*.

The Office action suggests that Kamen teaches a controller for commanding the motorized drive arrangement to apply a torque to one or more of the ground-contacting elements as a function of the attitude of the support platform. This suggestion is incorrect. Instead, Applicants maintain that the controller of Kamen applies a torque to one or more of the ground contacting elements as a function of the pitch of the support platform.¹

¹ The Kamen reference defines "pitch" to be the inclination angle with respect to gravity, i.e., with respect to the vertical. (Kamen, col. 5, lines 43-45.) "**Pitch**," thus, refers (in the Kamen reference, in particular) to an orientation with respect to the local vertical, i.e., with respect to gravity. "**Attitude**" refers to orientation with respect to the local underlying surface.

At col. 20, line 20 to col. 21, line 63, Kamen discloses sensors A and B which sense a distance to a stair rise and ground, respectively. However, as stated in our last response, these sensors are used to place the transporter into various modes, and not for applying torque to one or more ground contacting elements as a function of attitude, as suggested by the office action.

More particularly, upon sensor B sensing a step, the vehicle enters lean mode, as described by Kamen at col. 21, lines 18-21. In lean mode, the clusters are rotated as a function of the *pitch* of the support platform (with the wheels in slave mode driven as a function of the rotation of the clusters), as described by Kamen at col. 16, lines 28-58. This pitch is sensed by an inclinometer and not sensors A and B. To ascend stairs when in lean mode, “[t]he driver leans forward to create a *pitch* error. As a result, the cluster balancing algorithm applies a torque to the cluster motors. This torque rotates the clusters and causes the device to ascend the stairs,” as described by Kamen at col. 21, lines 24-27 (emphasis added).

Since Kamen fails to teach or suggest a controller that commands the motorized drive arrangement to apply a torque to one or more of the ground-contacting elements as a function of the attitude of the support platform, as required by claim 1, claim 1 is allowable over Kamen. Claims 3, 4, 8, and 11-13 depend on and incorporate independent claim 1, and are allowable for the same reasons as discussed above with regard to claim 1, and are further allowable in view of the additional limitations set forth therein. Independent claim 14 and dependent claims 15-20 require commanding the motorized drive arrangement to apply a torque to one or more of the ground-contacting elements as a function of the attitude. Thus, claims 14-20 are allowable for the same reasons as

discussed above with regard to claim 1, and are further allowable in view of the additional limitations set forth therein.

35 U.S.C. §103

Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kamen in view of Woods et al. (U.S. Patent 4,468,050, hereinafter, "Woods"). As stated above, Kamen fails to disclose that the controller commands the motorized drive arrangement to apply a torque to one or more of the ground-contacting elements as a function of the attitude of the support platform. Woods also fails to teach this limitation, and is instead directed towards an adaptive suspension system. Since neither Kamen nor Woods teach this required limitation of claim 2, the embodiment of claim 2 is deemed nonobvious over any combination of these references.

Claims 5, 9-11 and 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kishi in view of Sugasawa. (U.S. Patent 4,749,210). As stated above, Kishi fails to disclose that the controller commands the motorized drive arrangement to apply a torque to one or more of the ground-contacting elements as a function of the attitude of the support platform. Sugasawa also fails to teach this limitation, and is instead directed towards an automotive suspension control system. Since neither Kishi nor Sugawawa teach this required limitation of claims 5, 9-11, and 18-20, claims 5, 9-11, and 18-20 are deemed nonobvious over any combination of these references.


Applicant believes that no extension of time is required; however, this conditional petition is being made to provide for the possibility that the applicant has inadvertently

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overlooked the need for an extension of time. If any additional fees are required for the timely consideration of this application, please charge deposit account number 19-4972.

It is believed that the application is in condition for allowance. Consideration of the application and issuance of a notice of allowance are respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "A. J. Smolenski, Jr.", is written over a horizontal line.

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